

ABSTRACT

A loudspeaker is provided for receiving an incoming electrical signal and
5 transmitting an acoustical signal. The loudspeaker may include a power amplifier that
has an input and an output, where the input receives the incoming electrical signal. The
loudspeaker may also include two or more passive filters, such as low-pass, band-pass,
and/or high-pass filters, which are coupled to the output of the power amplifier. The
passive filters may also be coupled to one or more speaker drivers. The arrangement of
10 passive filters and speaker drivers may have a single input that has a combined input
impedance. The output of the amplifier may have an output impedance. The output
impedance may be between about 25% and about 400% of the combined input
impedance. The power amplifier may include a current-feedback amplifier that is
configured to maintain the desired output impedance.

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